

CONFIDENTIAL

1 What is claimed is:

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3 1. A computer readable medium on which is embedded a computer program, the
4 computer program comprising:
5 a plurality of interactions describing a plurality of messages to be received and/or
6 transmitted; and
7 at least one transition identifying the order of executing said plurality of interactions.

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9 2. The computer program of claim 1, wherein each of said plurality of interactions
10 describes transmitting a message of said plurality of messages and/or receiving a
11 message of said plurality of messages.

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13 3. The computer program of claim 2, wherein at least one interaction of said plurality of
14 interactions is configured to select one message to be received or transmitted from a
15 set of messages, said set of messages being included in said plurality of messages.

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17 4. The computer program of claim 3, wherein said plurality of messages are XML
18 documents.

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20 5. The computer program of claim 1, wherein said at least one transition includes a
21 source interaction of said plurality of interactions and a destination interaction of said
22 plurality of interactions, said source interaction being executed prior to said
23 destination interaction.

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25 6. The computer program of claim 5, wherein said at least one transition includes a
26 triggering message of said plurality of messages, said triggering message invoking
27 execution of said source interaction.

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7. The computer program of claim 5, wherein said at least one transition is an exception transition, said destination interaction being executed when a message type that is not expected by said source interaction is received.
8. The computer program of claim 5, wherein said at least one transition includes a default transition, said source interaction being executed when a message included in said source interaction that does not otherwise have a defined transition is received.
9. The computer program of claim 1, wherein said plurality of interactions describe a plurality of message types for said plurality of messages.
10. The computer program of claim 9, wherein said message types are schemas.
11. The computer program of claim 10, wherein said schemas are XML schemas.
12. The computer program of claim 11, wherein said plurality of interactions include a location or a unique name for said XML schema.
13. The computer program of claim 12, wherein said location or said unique name includes a URL or a URN.
14. A computer configured to generate a conversation controller from a description file, said conversation controller being operable to perform a sequence of interactions described in said description file, and said sequence of interactions includes at least one of receiving messages and transmitting messages.
15. The computer of claim 14, wherein at least one interaction of said sequence of interactions is configured to select one message to be received or transmitted from a set of messages.
16. The computer of claim 14, wherein said messages are XML documents.

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2 17. The computer of claim 14, further comprising at least one transition describing said

3 sequence of interactions, said at least one transition including a source interaction of

4 said interactions and a destination interaction of said interactions, said source

5 interaction being executed prior to said destination interaction.

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7 18. The computer program of claim 17, wherein said at least one transition includes a

8 triggering message of said messages, said triggering message invoking execution of

9 said source interaction.

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11 19. A computer providing a web service, said computer configured to communicate with

12 another computer based on a plurality of interactions described in a description file,

13 said plurality of interactions describing messages to be received and messages to be

14 transmitted to said another computer to facilitate said web service.

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16 20. The computer of claim 19, wherein said description file includes at least one

17 transition describing at least one sequence for executing one or more of said plurality

18 of interactions.

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20 21. The computer of claim 20, wherein said computer is connected to a registry storing a

21 plurality of description files associated with a plurality of web services, said plurality

22 of description files including said description file including said at least one

23 transition.

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25 22. The computer of claim 21, wherein said another computer retrieves said description

26 file including said at least one transition and transmits and receives messages to said

27 computer based on said description file including said at least one transition to utilize

28 said web service provided by said computer.

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30 23. The computer of claim 20, wherein said computer is connected to a registry storing a

31 plurality of description files associated with a plurality of web services, said plurality

1 of descriptions including a description of said description file including said at least
2 one transition.

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4 24. The computer of claim 21, wherein said another computer retrieves said description
5 file including said at least one transition and transmits and receives messages to said
6 computer based on said description file including said at least one transition to utilize
7 said web service provided by said computer.

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9 25. The computer of claim 21, wherein each of said plurality of description files are
10 identified by a URN.

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12 26. The computer of claim 19, wherein said messages are XML documents.

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14 27. The computer of claim 19, wherein said plurality of interactions describe a plurality
15 of message types to be received and a plurality of message types to be transmitted to
16 said another computer.

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